



Development of New Rule 326 IAC 20-95 Concerning Incorporation of National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

#05-23(APCB) / LSA Document #05-23

Update Since Preliminary Adoption

Specific references to the Federal Register notices were removed because they are no longer needed since references to the Code of Federal Regulations in Indiana's rules are now updated through July 1, 2005.

Overview

On September 13, 2004, the U.S. EPA published a new National Emission Standards for Hazardous Air Pollutants (NESHAP) Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR 63, Subpart DDDDD at 69 FR 55218). This rulemaking adopts that rule by reference, with an amendment intended to make the test notification provisions consistent with corresponding provisions of state law. The incorporation by reference also adopts the U.S. EPA's provision that allows source-wide averaging as a method for complying with the rule.

Citations Affected

Adds 326 IAC 20-95.

Affected Persons

Boilers or process heaters located at major sources of hazardous air pollutants (HAPs) are affected by this rule. Persons in the vicinity of these businesses will benefit from the reduced emissions.

Reason or Reasons for the Rule

IDEM must incorporate the federal NESHAP requirements into state rules or establish state requirements that are no less stringent than the NESHAP.

Economic Impact of the Rule

Because this emission standard is a federal

requirement and businesses are required to comply, the state rulemaking will not result in additional costs to the regulated entities beyond the costs imposed by the federal rule.

Benefits of the Rule

Citizens living and working in the vicinity of these businesses will benefit from the reduced emissions of hazardous air pollutants. IDEM will be able to enforce the standards by incorporating them into state law.

Description of the Rulemaking Project

On September 13, 2004, U.S. EPA published a final NESHAP (69 FR 55218) to reduce arsenic, cadmium, chromium, hydrogen chloride, hydrogen fluoride, lead, manganese, mercury, nickel, and various organic HAPs from industrial, commercial, and institutional boilers and process heaters. The NESHAP will implement Section 112(d) of the Clean Air Act by requiring all major sources in this source category to meet HAP emission standards reflecting the application of maximum achievable control technology (MACT). Major sources are sources that emit ten (10) tons a year or more of a single HAP, or twenty-five (25) tons a year or more of a combination of HAPs. The NESHAP includes emission limits and work practice standards for new and existing units. Boilers produce steam by burning any combination of coal,

wood, or other fuel. The steam is used to produce electricity or heat. Process heaters heat raw or intermediate materials during an industrial process. Boilers and process heaters are used at facilities such as refineries, chemical and manufacturing plants, paper mills, or as stand-alone units for heat.

The rule contains solid, liquid, and gaseous fuel subcategories of boilers and process heaters. Solid fuel includes, but is not limited to, coal, wood, biomass, tires, plastics, and other nonfossil solid materials. Liquid fossil fuel means petroleum, distillate oil, residual oil and any form of liquid fuel derived from such material. Gaseous fuel includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. Blast furnace gas is exempted from the definition of gaseous fuel.

The rule limits the amount of HAPs that may be released from exhaust stacks of existing large and limited use solid fuel boilers and process heaters. Large units are watertube boilers and process heaters with heat input capacities greater than ten (10) million British thermal units per hour (MMBtu/hr). A process heater means an enclosed device using controlled flame, that is not a boiler, and the unit's primary purpose is to transfer heat indirectly to a process material or to heat transfer material for use in a process unit, instead of generating steam. Process heaters do not include units used for comfort or space heat, food preparation for on-site consumption, or autoclaves. Large existing solid fuel units are subject to a particulate matter (PM) limit or an alternative total selected metals (TSM), hydrogen chloride (HCl,) and mercury (Hg) limits. Large existing limited use solid fuel units are only subject to the PM or alternative TSM limit. Existing industrial boilers and process heaters must comply with the rule no later than September 13, 2007. Boilers and process heaters in the existing large or limited use gaseous or liquid fuel subcategories only have to submit an initial notification report and are not subject to any other requirements in the rule. Boilers or process heaters in the existing

small gaseous, liquid, or solid fuel subcategories are not required to keep any records or submit an initial notification. Initial notifications were due March 12, 2005.

For new units, large and limited use solid fuel units are subject to PM/TSM, HCl, Hg, and carbon monoxide (CO) limits. New small solid fuel units are subject to PM/TSM, HCl, and Hg limits. New large and limited use liquid fuel units are subject to PM, HCl, and CO limits. New small liquid fuel units are subject to PM and HCl limits. New large gaseous fuel units are subject to a CO limit. New small liquid fuel units that only burn gaseous fuel or distillate oil only have to submit an initial notification. New small gaseous fuel subcategory units are not required to keep any records or submit an initial notification. New industrial boilers and process heaters must comply with the final rule when they are brought on line.

The final rule includes a compliance alternative provided for in the Clean Air Act (Section 112(d)(4)) based on threshold emission limits for HCl and manganese. If an owner/operator demonstrates that its boiler units can meet health based threshold emission limits, such sources are no longer subject to either the HCl limit in the rule or the manganese portion of the TSM limit. This compliance alternative is based on a U.S. EPA determination that those units do not pose a significant risk to human health or the environment. Sources that are eligible for the compliance alternative established in the federal rule must assume federally enforceable emissions limitations in their Title V permit. These limits ensure that the HAP emissions do not exceed levels used to qualify for the compliance alternative.

In the draft rule for this rulemaking IDEM had proposed to add additional implementation measures to the health-based compliance alternative in the NESHAP. On December 28, 2005, U.S. EPA issued final amendments to the NESHAP reconsideration making IDEM's proposed changes unnecessary (70 FR 76918). Some of the changes that U.S. EPA made to improve and clarify the process for

demonstrating eligibility to comply with the health-based compliance alternative include: explicit statements regarding review of demonstrations for technical soundness; expanded list of parameters that should be considered for inclusion in the Title V permit; demonstration updates for non-process related parameters and compliance timeline for changes outside the sources control; and exposure assessments for where people live or congregate.

On October 31, 2005, U.S. EPA proposed amendments to allow for consolidated testing of commonly vented boilers under the emissions averaging provision and updated the list of available American Society for Testing and Materials (ASTM) test methods (70 FR 62264). IDEM will add these amendments to the state rule when they are final.

Scheduled Hearings

First Public Hearing: March 1, 2006, Room A, Indiana Government Center South, 402 West Washington Street, Indianapolis, Indiana.

Second Public Hearing: June 7, 2006.

Consideration of Factors Outlined in Indiana Code 13-14-8-4

Indiana Code 13-14-8-4 requires that in adopting rules and establishing standards, the board shall take into account the following:

- 1) All existing physical conditions and the character of the area affected.
- 2) Past, present, and probable future uses of the area, including the character of the uses of surrounding areas.
- 3) Zoning classifications.
- 4) The nature of the existing air quality or existing water quality, as appropriate.
- 5) Technical feasibility, including the quality conditions that could reasonably be achieved through coordinated control of all factors

affecting the quality.

6) Economic reasonableness of measuring or reducing any particular type of pollution.

(7) The right of all persons to an environment sufficiently uncontaminated as not to be injurious to:

- (A) human, plant, animal, or aquatic life; or
- (B) the reasonable enjoyment of life and property.

Consistency with Federal Requirements

The new rules are consistent with federal rules.

Rulemaking Process

The first step in the rulemaking process is a first notice published in the *Indiana Register*. This includes a discussion of issues and opens a first comment period. The second notice is then published which contains the comments and the department's responses from the first comment period, a notice of first meeting/hearing, and the draft rule. The Air Pollution Control Board holds the first meeting/hearing and public comments are heard. The proposed rule is published in the *Indiana Register* after preliminary adoption along with a notice of second meeting/hearing. If the proposed rule is substantively different from the draft rule, a third comment period is required. The second public meeting/hearing is held and public comments are heard. Once final adoption occurs, the rule is reviewed for form and legality by the Attorney General, signed by the Governor, and becomes effective 30 days after filing with the Secretary of State.

IDEM Contact

Additional information regarding this rulemaking action can be obtained from Susan Bem, Rules Section, Office of Air Quality, (317) 233-5697 or (800) 451-6027 (in Indiana).